

WHAT IS CLAIMED IS:

1. A building material, comprising:
a plurality of synthetic microspheres having an alkali metal oxide content of less than about 10 wt.% based on the weight of the microspheres, wherein the synthetic microspheres are substantially chemically inert.
2. The building material of Claim 1, further comprising a cementitious matrix.
3. The building material of Claim 2, wherein the synthetic microspheres are substantially chemical inert when in contact with the cementitious matrix.
4. The building material of Claim 1, wherein the synthetic microspheres have an average particle diameter of between about 30 to 1000 microns.
5. The building material of Claim 4, wherein the synthetic microspheres comprise at least one synthetically formed cavity that is substantially enclosed by an outer shell.
6. The building material of Claim 5, wherein the at least one cavity comprises about 30-95% of the aggregate volume of the microsphere.
7. The building material of Claim 2, further comprising one or more fibers in the cementitious matrix.
8. The building material of Claim 7, wherein at least some of the fibers are cellulose fibers.
9. The building material of Claim 1, further comprising a hydraulic binder.
10. The building material of Claim 1, wherein the synthetic microspheres comprise an aluminosilicate material.
11. The building material of Claim 1, further comprising natural cenospheres wherein the average particle diameter of the natural cenospheres is substantially equal to the average particle size of the synthetic microspheres.
12. The building material of Claim 1, wherein the building material comprises a pillar.
13. The building material of Claim 1, wherein the building material comprises a roofing tile

14. The building material of Claim 1, wherein the building material comprises a siding.
15. The building material of Claim 1, wherein the building material comprises a wall.